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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/774,778	02/09/2004	Gregor Dudziak	Bayer 10269-WCG	8841
27386	7590	08/31/2006	EXAMINER	
NORRIS, MCLAUGHLIN & MARCUS, P.A. 875 THIRD AVE 18TH FLOOR NEW YORK, NY 10022			MENON, KRISHNAN S	
			ART UNIT	PAPER NUMBER
			1723	

DATE MAILED: 08/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/774,778

Applicant(s)

DUDZIAK ET AL.

Examiner

Krishnan S. Menon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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### **DETAILED ACTION**

Claims 1-17 are pending as originally filed.

Objection to Claim 17 is hereby withdrawn; Applicant clarified that the unit of hPa is correct.

### ***Information Disclosure Statement***

The English abstract of EP 0 263 953 is not sufficient to understand the relevance of the reference to the claimed subject matter. The abstract says:

**Abstract of EP0263953**

The rhodium complexes contain water-soluble organic phosphines and are used as constituents of catalyst systems. The separation is carried out using a membrane separation process.

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Since the claimed process is a membrane separation process, more details of what the reference teaches about the membrane separation process is required. This abstract is grossly inadequate. Therefore, this reference cannot be considered, and was crossed out from the IDS.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1, 3-11, and 15-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsuru et al ("Nanofiltration of non-aqueous solutions by porous silica-zirconia membranes", J. Membrane Sci., 185 (2001) 253-261).

The Tsuru article teaches a process for separation from non-aqueous solutions of a substance (PEG, etc). Membrane is porous with pore size 1-4 nm, formed on a ceramic substrate (alumina), and hydrophobic coating applied by reaction with tetraethoxysilane (page 254). Surface is hydrophobic – see page 256, column 2. Solvent is alcohols, temperature is 25-60 C, pressure is 2-3 MPa (page 255).

2. Claims 1-8 and 10-17 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 01/07157.

WO teaches a process for separating solutes or colloids such as catalysts (page 7, 8: rhodium-organophosphite complex) from a non-aqueous solution. Membrane is ceramic (alumina, zirconia: page 10), with hydrophobic coating (the sub-nanoporous coating of metal or ceramic or inorganic polymeric material is a coating (page 7), they are inherently hydrophobic: evidence Tsuru article above for a similar membrane), pore size 30 Å (page 7, 8,9,11), solvent can be alcohol, hydrocarbons, etc (page 6, 8: see the incorporated reference), pressure is about 4000 kPa (600 psi: page 10).

### ***Response to Arguments***

Applicant's arguments filed 8/21/06 have been fully considered but they are not persuasive. With respect to the Tsuru reference, arguments are not commensurate in

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scope with the claims. The silica/zirconia is a coating on the surface of a microporous membrane; the reference teaches it as relatively hydrophobic; the pore sizes are less than 30 nm; therefore, the reference anticipates the claims.

With respect to the WO'157 reference, arguments are not persuasive because the sub-nanoporous layer is a coating on a microporous membrane; applicant has not shown with any evidence that the membrane surface is not hydrophobic. Arguments are also not commensurate in scope with the claims. Claims only recite a membrane having a hydrophobic coating and pore diameter not more than 30 nm. Giving the broadest reasonable interpretation, the claims are anticipated by the reference as shown. (During examination, the claims must be interpreted as broadly as their terms reasonably allow. In re American Academy of Science Tech Center, \*\*>367 F.3d 1359, 1369, 70 USPQ2d 1827, 1834 (Fed. Cir. 2004)< (The USPTO uses a different standard for construing claims than that used by district courts; during examination the USPTO must give claims their broadest reasonable interpretation.).

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krishnan S. Menon whose telephone number is 571-272-1143. The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L. Walker can be reached on 571-272-1151. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'K S Menon', followed by the date '8/28/06' written vertically.

Krishnan S Menon  
Examiner  
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